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Exhibit R-2, RDT&E Budget Item Justification: PB 2019 United States Special Operations Command	Date: February 2018
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Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide I</i> BA 7: <i>Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 1160434BB / <i>Unmanned ISR</i>											
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	0.000	19.110	34.766	27.270	11.700	38.970	30.549	30.207	29.274	71.165	Continuing	Continuing
S855: <i>Unmanned ISR</i>	0.000	19.110	34.766	27.270	11.700	38.970	30.549	30.207	29.274	71.165	Continuing	Continuing

A. Mission Description and Budget Item Justification

NOTE: Unmanned Intelligence, Surveillance, and Reconnaissance (ISR) includes the consolidation of Special Applications for Contingencies (previously Program Element (PE) 0304210BB); MQ-1 Unmanned Aerial Vehicle (UAV), (previously PE 0305219BB); MQ-8, (previously PE 0305231BB); RQ-11, UAV (previously PE 1105232BB); and RQ-7 UAV, (previously PE 1105233BB).

This program element is part of the Military Intelligence Program (MIP). Unmanned ISR develops and deploys special capabilities to perform Intelligence, Surveillance, and Reconnaissance (ISR) for deployed Special Operations Forces (SOF) using non-traditional means. USSOCOM has been designated as the DOD lead for planning, synchronizing, and as directed, executing global operations against terrorist networks and targets. USSOCOM requires the capability to find, fix, and finish time-sensitive high-value fixed and fleeting targets at the unit and team level without placing personnel and units in harm's way. These targets can often only be identified with patient collection of information and require rapid, decisive action during the short periods in which they present themselves. This PE addresses the primary areas of ISR and Targeting capabilities for SOF.

B. Program Change Summary (\$ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	22.117	34.766	28.060	-	28.060
Current President's Budget	19.110	34.766	27.270	11.700	38.970
Total Adjustments	-3.007	0.000	-0.790	11.700	10.910
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-3.007	-			
• SBIR/STTR Transfer	-	-			
• Other	-	-	-0.790	11.700	10.910

Change Summary Explanation

Funding:

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<p>FY 2017: Net decrease of -\$3.007 million due to the reprogramming increase of \$0.200 million for development and combat evaluation of selected sensor delivery platforms and mounted or deliverable ISR capabilities for global contingencies including short-notice requirements and decrease of \$3.207 million reprogrammed for higher command priorities.</p> <p>FY 2018: None.</p> <p>FY 2019: Net decrease of \$0.790 million is an increase that continues evaluation of unique sensor technologies, persistent stare, and quick reaction systems (\$3.219 million); a decrease due to a Departmental economic assumption adjustment (-\$0.263 million); and the FY2019 funding request was reduced by -\$3.746 million to account for the availability of prior year execution balances.</p> <p>FY 2019 OVERSEAS CONTINGENCY OPERATIONS. Increase of \$11.700 million is for advanced payload development; development and integration of Beyond Line of Sight wiring harnesses required to operate SOF-unique sensors, VORTEX encrypted data link capability, and Persistent Close Air Support collaborative engagement management capabilities on the SOF Gray Eagle Extended Range UAS.</p> <p>Schedule: None.</p> <p>Technical: None.</p>		

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Exhibit R-2A, RDT&E Project Justification: PB 2019 United States Special Operations Command										Date: February 2018		
Appropriation/Budget Activity 0400 / 7					R-1 Program Element (Number/Name) PE 1160434BB / <i>Unmanned ISR</i>				Project (Number/Name) S855 / <i>Unmanned ISR</i>			
COST (\$ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
S855: <i>Unmanned ISR</i>	0.000	19.110	34.766	27.270	11.700	38.970	30.549	30.207	29.274	71.165	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

This project is part of the Military Intelligence Program (MIP). Develops and deploys special capabilities to perform intelligence, surveillance, and reconnaissance (ISR) for deployed Special Operations Forces (SOF) using non-traditional means.

Group 1, 2, 3 and 4, Unmanned Aerial Systems (UAS) developmental efforts are to identify, develop, integrate, and test SOF-unique mission kits, mission payloads, air vehicle enhancements, and modifications to ground control stations. SAFC develops and integrates UAS payloads to advance ISR capabilities that address dynamic and emergent operational needs of the SOF user. Efforts include improving imagery intelligence and electronic warfare payloads, capitalizing on developing technologies to reduce size, weight and power while addressing processing and data management challenges. This program also provides a mechanism for SOF user combat evaluation of emerging sensor technologies.

B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Title: SAFC	15.300	29.499	20.679	-	20.679
Description: Provides for efforts to develop and integrate Unmanned Aerial Systems (UAS) payloads and technologies to advance ISR capabilities to address dynamic and emergent operational needs and vulnerabilities of the SOF user. Efforts include improving imagery intelligence and electronic warfare payloads, capitalizing on developing technologies to reduce size, weight and power while addressing processing and data management challenges. It also provides a mechanism for SOF user combat evaluation of emerging sensor technologies. SAFC applies focused Research & Development (R&D) for relatively low cost solutions to provide short lead-time contingency planning requirements where focused R&D will allow for test and evaluation of leading edge solutions to emergent problem sets.					
FY 2018 Plans: Continue development and combat evaluation of selected sensor delivery platforms and mounted or deliverable ISR capabilities for global contingencies including short-notice requirements. Continue to evaluate unique sensor technologies, persistent stare and quick reaction systems.					
FY 2019 Base Plans:					

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Continues development and combat evaluation of selected sensor delivery platforms and mounted or deliverable ISR capabilities for global contingencies including short-notice requirements. Continues evaluation of unique sensor technologies, persistent stare and quick reaction systems.						
FY 2018 to FY 2019 Increase/Decrease Statement: Decrease of \$8.820 million is due to completion of development for a classified program.						
Title: Group 1 UAS Description: Group 1 UAS are small tactical systems, less than 20 pounds in weight. Provides for development efforts to identify, develop, integrate, and test SOF-unique mission kits. FY 2018 Plans: Continue to integrate, and test SOF-unique mission kits, mission payloads, and modifications to the small tactical UAS and ground control station, to include but not limited to: improved capabilities for geo-location, collection of push-to-talk, communications, specialized tagging, tracking, and locating, and enhanced communications relay and work to miniaturize previously developed payloads. FY 2019 Base Plans: Continues integration and testing of SOF-unique mission kits, mission payloads, and modifications to the small tactical UAS and ground control station, to include but not limited to: improved capabilities for geo-location, collection of push-to-talk, communications, specialized tagging, tracking, and locating, and enhanced communications relay and work to miniaturize previously developed payloads. FY 2018 to FY 2019 Increase/Decrease Statement: Decrease of \$0.026 million is for minor adjustments.		0.124	0.355	0.329	-	0.329
Title: Group 2 UAS Description: Group 2 UAS are medium tactical systems, between 21 pounds and 55 pounds in weight. Provides for development efforts to identify, develop, integrate, and test SOF-unique mission kits. FY 2018 Plans: Continue to integrate, and test SOF-unique mission capabilities to the medium tactical UAS, to include but not limited to: signals intelligence gathering, full motion video, and geo-location. FY 2019 Base Plans:		3.686	4.912	6.262	-	6.262

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B. Accomplishments/Planned Programs (\$ in Millions)		FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Continues integration and testing of SOF-unique mission capabilities to the medium tactical UAS, to include but not limited to: signals intelligence gathering, full motion video, and geo-location.						
FY 2018 to FY 2019 Increase/Decrease Statement: Increase of \$1.350 million is for additional integration efforts for new generation platform.						
Title: Group 3 UAS Description: Group 3 UAS are systems, between 55 pounds and 1320 pounds in weight. Provides for development efforts to identify, develop, integrate, and test SOF-unique mission kits. FY 2019 Base Plans: None. FY 2019 OCO Plans: Develops various advanced payloads to support ISR payload requirements in support of SOF missions to include counterterrorism execution order missions. Current Service payloads are insufficient for precision application of SOF mission sets. FY 2018 to FY 2019 Increase/Decrease Statement: Increase of \$5.000 million is to develop various advanced payloads to support ISR payload requirements.		-	-	0.000	5.000	5.000
Title: Group 4 UAS Description: Group 4 UAS are large systems that weigh greater than 1,320 pounds and fly higher than flight level 180. Provides for development efforts to identify, develop, integrate, and test SOF-unique mission kits. FY 2019 Base Plans: None. FY 2019 OCO Plans: Develop and integrate Beyond Line of Sight (BLOS) wiring harnesses required to operate SOF-unique sensors, VORTEX encrypted data link capability, and Persistent Close Air Support (PCAS) collaborative engagement management capabilities on the SOF Gray Eagle Extended Range UAS. FY 2018 to FY 2019 Increase/Decrease Statement:		-	-	0.000	6.700	6.700

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B. Accomplishments/Planned Programs (\$ in Millions)

	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Increase of \$6.700 million is for development and integration of BLOS wiring harnesses required to operate SOF-unique sensors, VORTEX encrypted data link capability, and PCAS collaborative engagement management capabilities on the SOF Gray Eagle Extended Range UAS.					
Accomplishments/Planned Programs Subtotals	19.110	34.766	27.270	11.700	38.970

C. Other Program Funding Summary (\$ in Millions)

Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
• PROC/0201UMNISR: <i>Unmanned ISR</i>	97.750	52.228	57.708	17.000	74.708	7.099	11.896	11.171	11.395	Continuing	Continuing

Remarks

D. Acquisition Strategy

SAFC acquisition strategy is evolutionary and spiral-based for technology insertion and low volume procurement. Utilizes existing competed contract vehicles to the maximum extent possible for minor development and integration and modification of Government-Off-The-Shelf/Commercial-Off-The-Shelf equipment. It utilizes limited/full and open competition contracts for major developments.

The Group 1 UAS are evolutionary acquisition programs that deliver, integrate, and qualify SOF-unique mission kits, mission payloads, weapons, air vehicle enhancements, and ground control station upgrades. Contracting methods depend on the type of development effort. Competitive source selection will be conducted as much as possible. Proprietary considerations may direct some effort to the Original Equipment Manufacturer (OEM).

Group 2 UAS are evolutionary acquisition programs that deliver, integrate, and qualify SOF-unique mission kits, mission payloads, weapons, air vehicle enhancements, and ground control station upgrades. Contracting methods depend on the type of development effort. Competitive source selection will be conducted as much as possible. Proprietary considerations may direct some effort to the OEM.

Group 3 UAS are evolutionary acquisition programs that deliver, integrate, and qualify SOF-unique mission kits, mission payloads, weapons, air vehicle enhancements, and ground control station upgrades. Contracting methods depend on the type of development effort. Competitive source selection will be conducted as much as possible. Proprietary considerations may direct some effort to the OEM. Group 4 UAS are evolutionary acquisition programs that deliver, integrate, and qualify SOF-unique mission kits, mission payloads, weapons, air vehicle enhancements, and ground control station upgrades. Contract types include a mix of cost type and fixed priced. Contracting methods depend on the type of development effort. Competitive source selection will be conducted as much as possible. Proprietary issues with aircraft and Electro-Optical/Infrared (EO/IR) sensor Operational Flight Program (OFP) software and aircraft modification considerations dictate sole source contracts.

Group 4 UAS leverages service common Contractor Logistics Support (CLS) contracts for aircraft and ancillary equipment sustainment.

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E. Performance Metrics N/A		

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 United States Special Operations Command **Date:** February 2018

Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1160434BB / <i>Unmanned ISR</i>	Project (Number/Name) S855 / <i>Unmanned ISR</i>
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Product Development (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SAFC Platform/Payload Development and Integration	MIPR	Various : Various	-	7.161	Mar 2017	8.299	Mar 2018	11.141	Mar 2019	-		11.141	Continuing	Continuing	-
SAFC Platform/Payload Development and Integration	MIPR	SRT SATCOMM : Various	-	-		1.391	Jan 2018	-		-		-	0.000	1.391	-
SAFC Platform/Payload Development and Integration	MIPR	SRT Hardware Tracker : Various	-	-		1.100	Apr 2018	-		-		-	0.000	1.100	-
Classified Program	MIPR	Classified : Classified	-	2.382		3.000		-		-		-	Continuing	Continuing	-
Group 1 Unmanned Aerial System (UAS) Payload Integration	C/IDIQ	Various : Various	-	0.124	Mar 2017	0.355	Mar 2018	0.329	Mar 2019	-		0.329	Continuing	Continuing	-
Group 2 UAS Platform/ Payloads Development	C/TBD	Various : Various	-	1.627	Mar 2017	2.456	Mar 2018	2.632	Mar 2019	-		2.632	Continuing	Continuing	-
Group 3 UAS Payload Integration	C/TBD	Various : Various	-	-		-		0.000		5.000	Mar 2019	5.000	Continuing	Continuing	-
Group 4 UAS Platform/ Payloads Development and Integration	C/TBD	Various : Various	-	-		-		0.000		6.700	Nov 2018	6.700	Continuing	Continuing	-
Subtotal			-	11.294		16.601		14.102		11.700		25.802	Continuing	Continuing	N/A

Support (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SAFC Platform/Payload Integration	MIPR	Various : Various	-	0.600	Jan 2017	0.682	Jan 2018	0.527	Jan 2019	-		0.527	-	-	-
Group 2 UAS Platform/ Payload Support	C/TBD	Various : Various	-	0.617	Mar 2017	0.736	Mar 2018	1.088	Mar 2019	-		1.088	-	-	-
Subtotal			-	1.217		1.418		1.615		-		1.615	-	-	N/A

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 United States Special Operations Command												Date: February 2018			
Appropriation/Budget Activity 0400 / 7						R-1 Program Element (Number/Name) PE 1160434BB / Unmanned ISR				Project (Number/Name) S855 / Unmanned ISR					
Test and Evaluation (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SAFC Sensor Testing, Evaluation and Demonstration	MIPR	Various : Various	-	4.084	Mar 2017	12.978	Mar 2018	7.428	Mar 2019	-		7.428	-	-	-
Group 2 UAS Platform/ Payload Test and Evaluation	C/TBD	Various : Various	-	0.825	Mar 2017	0.984	Mar 2018	1.454	Mar 2019	-		1.454	-	-	-
Subtotal			-	4.909		13.962		8.882		-		8.882	-	-	N/A
Management Services (\$ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
SAFC Sensor Testing, Evaluation and Demonstration Management	MIPR	Various : Various	-	1.073	Mar 2017	2.049	Mar 2018	1.583	Mar 2019	-		1.583	-	-	-
Group 2 UAS Platform/ Payload Management	C/TBD	Various : Various	-	0.617	Mar 2017	0.736	Mar 2018	1.088	Mar 2019	-		1.088	-	-	-
Subtotal			-	1.690		2.785		2.671		-		2.671	-	-	N/A
			Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			-	19.110		34.766		27.270		11.700		38.970	Continuing	Continuing	N/A
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 United States Special Operations Command

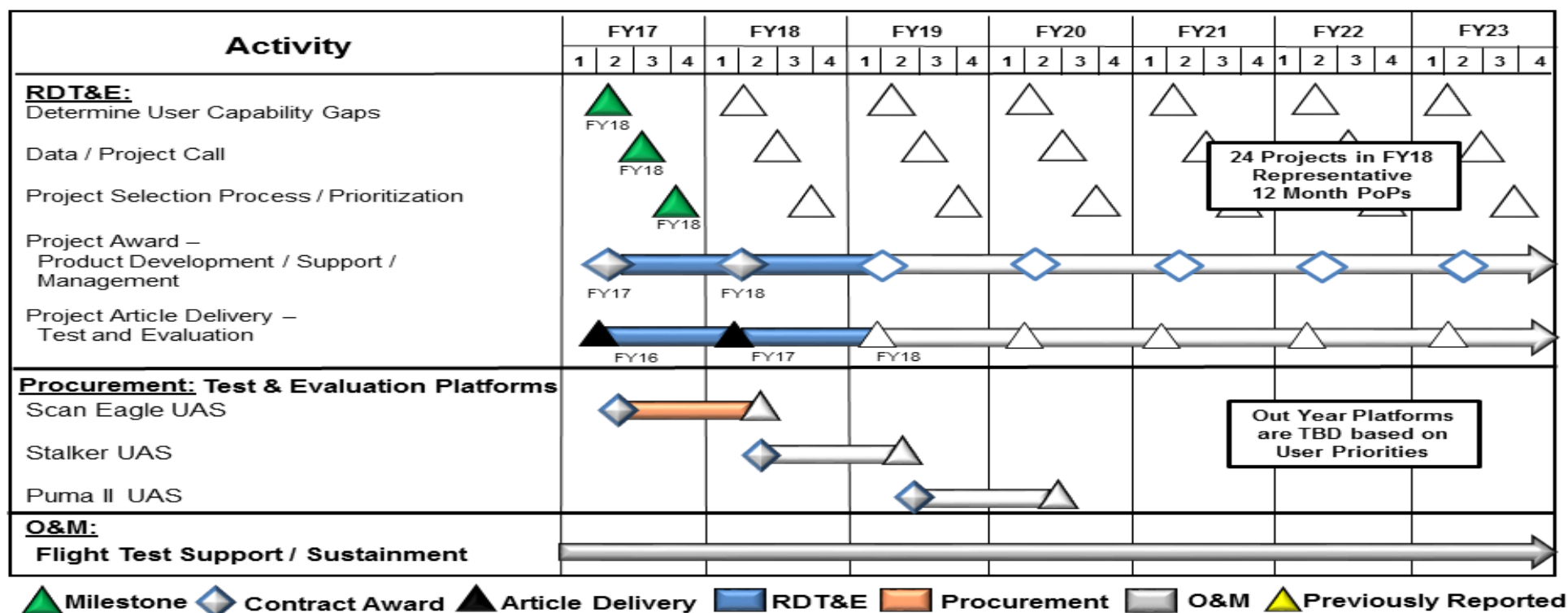
Date: February 2018

Appropriation/Budget Activity
0400 / 7

R-1 Program Element (Number/Name)
PE 1160434BB / Unmanned ISR

Project (Number/Name)
S855 / Unmanned ISR

SAFC Schedule



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Exhibit R-4, RDT&E Schedule Profile: PB 2019 United States Special Operations Command

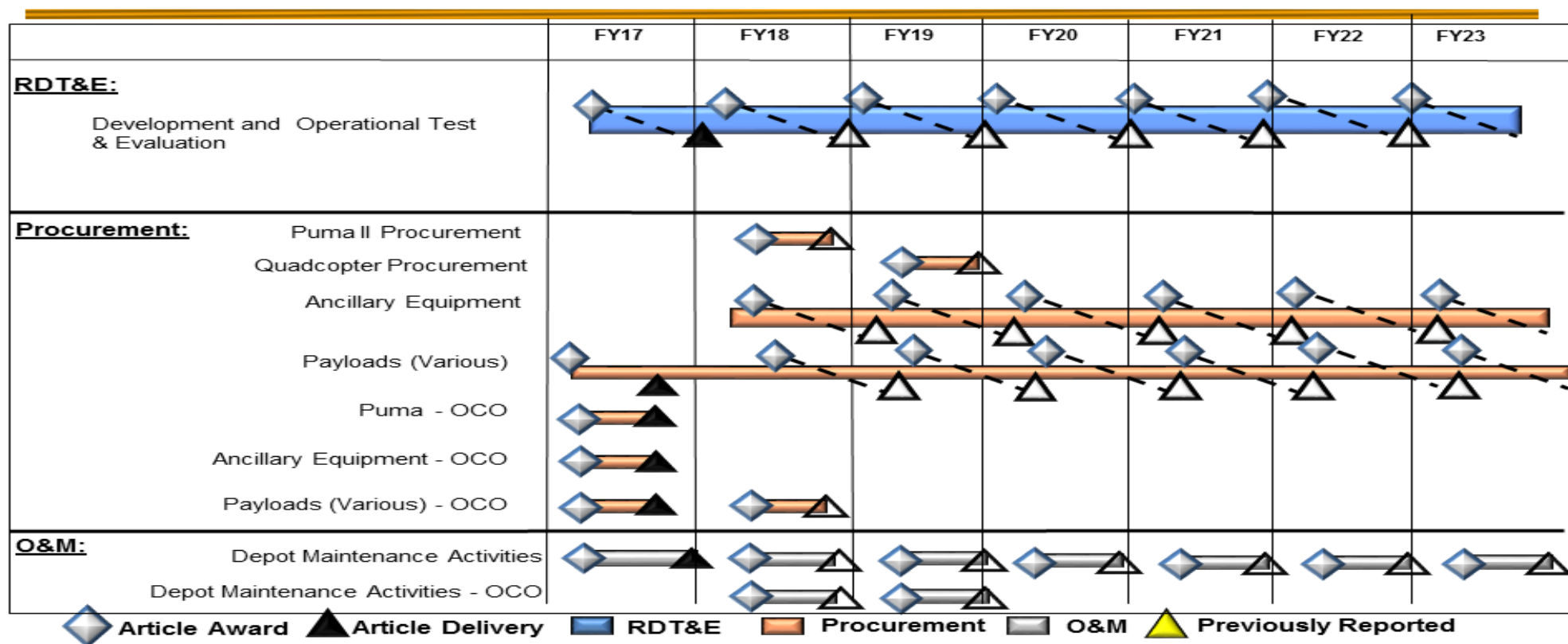
Date: February 2018

Appropriation/Budget Activity
0400 / 7

R-1 Program Element (Number/Name)
PE 1160434BB / Unmanned ISR

Project (Number/Name)
S855 / Unmanned ISR

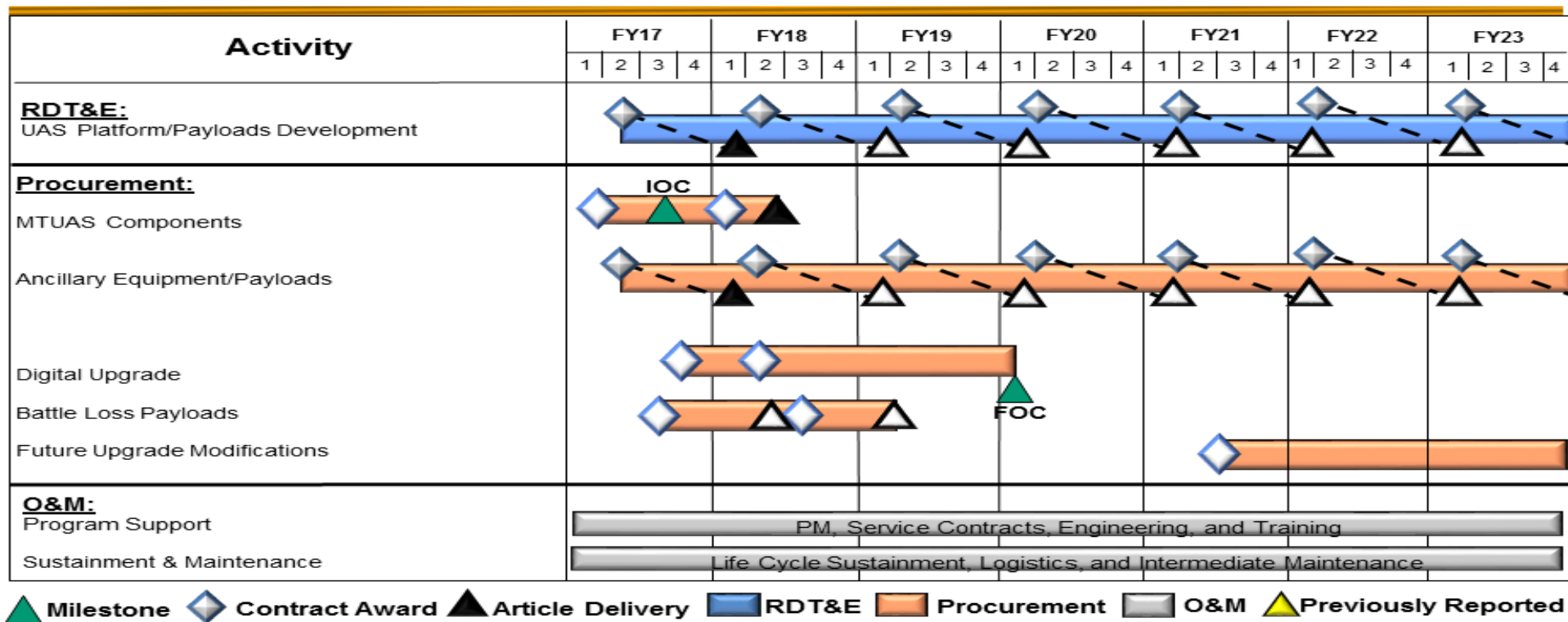
Group 1 Unmanned ISR Schedule



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Exhibit R-4, RDT&E Schedule Profile: PB 2019 United States Special Operations Command			Date: February 2018		
Appropriation/Budget Activity 0400 / 7		R-1 Program Element (Number/Name) PE 1160434BB / <i>Unmanned ISR</i>		Project (Number/Name) S855 / <i>Unmanned ISR</i>	



Group 2 (MTUAS) Schedule



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Exhibit R-4, RDT&E Schedule Profile: PB 2019 United States Special Operations Command			Date: February 2018
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Group 3 (STUAS) Schedule

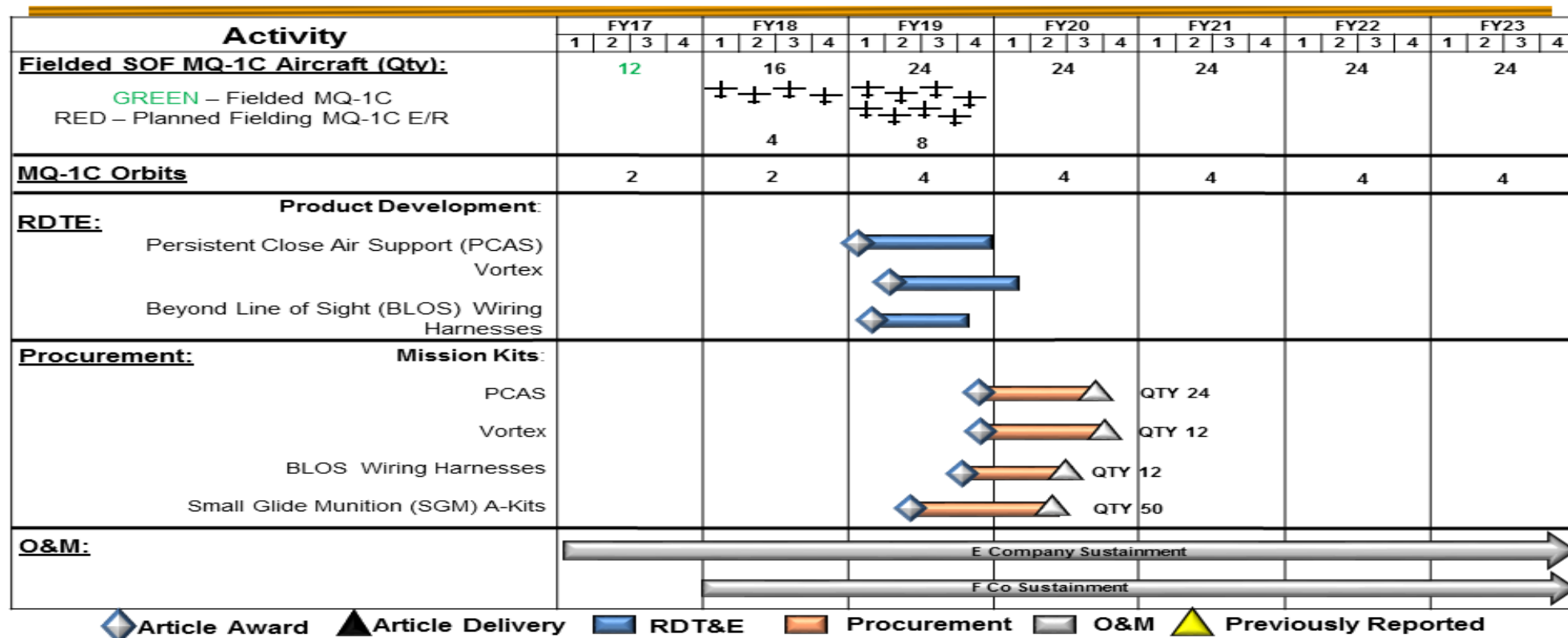
Activity	FY17	FY18	FY19	FY20	FY21	FY22	FY23
<u>RDT&E:</u> Payload Development & Integration							
<u>Procurement:</u> STUAS Payloads							

 IOC/FOC
  Contract Award
  Article Delivery
  RDT&E
  Procurement
  O&M
  Previously Reported

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Exhibit R-4, RDT&E Schedule Profile: PB 2019 United States Special Operations Command			Date: February 2018
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Group IV Unmanned ISR Schedule



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Exhibit R-4A, RDT&E Schedule Details: PB 2019 United States Special Operations Command			Date: February 2018
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
SAFC				
Platform/Payload Development and Integration	2	2017	4	2023
Sensor Testing, Evaluation and Demonstration	2	2017	4	2023
Group 1 Unmanned Aerial System (UAS)				
Payload Integration	2	2017	4	2023
Group 2 UAS				
Operational Test/Operational Assessment (OT/OA)	2	2017	4	2023
Payload Integration	2	2017	4	2023
Group 3 UAS				
Payload Integration	2	2019	4	2023
Group 4 UAS				
Platform/Payload Development and Integration	1	2019	2	2020